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ABSTRACT

Using a mathematical model and data from four case studies, an economist analyzes the types, costs, and beneficiaries of student services in higher education. Student services are defined as in-kind, consumption-oriented, extra-academic activities produced by universities primarily to serve students. The four categories of student services include basic needs services (housing, food, and health); personal counseling activities; services for student organizations and minorities; and cultural, recreational, and sports services. Universities produce student services as inputs that contribute to educational or community outputs, or because of shortages in local services markets. The author constructs models for computing unit services costs (per student and per service user), cost burdens, and transfers of net benefits to service users. The models are applied to data on the four types of services and on enrollments, degrees, staffing, funding, and other variables at two public and two private universities. Results of the analysis indicate, for each type of service, a substantial transfer of benefits from non-users to users. Discussion of projected changes leads the author to opine that student services will not be cut back soon despite downward demographic and economic trends. (Author/RW)

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STUDENT SERVICES:
RATIONALE, COSTS, AND UTILIZATION

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Abstract

The purpose of this paper is to explore student services from an economist's perspective and to clarify why universities become involved in providing these services, at which costs, and for the benefit of whom.

Definition and classification of student services have to be offered and an explicit statement about the various reasons of their development has to be attempted. Then, the main task is to identify the costs of student services and to investigate how the burden of costs is shared by the various constituencies in the university. The patterns of finance varies a lot from one institution to another one; moreover, what is generally observed within one institution is a mix of the sources of funding, and no strict allocation of monies to a specific activity. In some cases, though, a fee-for-service system is applied.

To complete the analysis, one has to get into the net benefits which occur on behalf of the student services. Because the set of students who pay for a given service is generally distinct from the set of students who use the service, a complex reaction of transfers can be seen between payers and users. The paper suggests some devices to give an account of these transfers. The preliminary results presented in the paper are mainly drawn from a limited number of case studies.

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INTRODUCTION

This is a first-step attempt to clarify why universities become involved in providing student services, at which cost, and for the benefit of whom.

Considering the general context of declining enrollments, growing public control and shrinking resources, it is expected that non-academically-essential activities such as student services are likely to be among the first targets if significant cutbacks are to occur.

Students services in this view are considered as an indicator of the new thrusts higher education is going to face. A better appraisal of the present situation of these services is both a prerequisite for a sound prediction of their future fate as well as a good tool for building up hypotheses about the future of the whole system of higher education.

The study is divided in two sections. First, an analytical framework is developed to identify and classify student services and to estimate their costs and the transfers they may generate (I). Second, some empirical material, mainly based on case studies is presented, to substantiate the analysis of the resources allocated to student services (II).

1. GENERAL FRAMEWORK

What student services are (are not), where they stand in the bureaucracies of higher education, which amount of resources is devoted to them, and who actually takes advantage of them: none of these issues can be taken for granted; each of them, when considered with care would prompt a discussion. This fuzziness about the nature, the administration, the costs, net benefits and use of student services is true not only for the layman, but also for most university managers, for students and faculty and for educationalists.

Now the constraints (economic, demographic) which plague higher education call for an apportionated effort to clarify each and every segment of educational activities. To our knowledge, little has been done on a systematic basis for this purpose. Good studies are available to understand how student services have come into being (Miller & Price, 1979). There are also a number of studies directed to student services managers (Delworth & Hanson, 1980), but the scope of these studies is rather microeconomics oriented, and they do not provide grounds for a cost-efficiency analysis of the services. Therefore, there is a real need to apply an analytical framework to student services, capable of responding to the general demand for accountability which student services are going to face.

This is why the first section of this work is devoted to this effort of classification. To begin with, the nature of student services is delimited, and the points of differentiation from other services, precise; an order of magnitude of the resources attracted by student services is provided (I.1). Then, an analytical framework is devised; its aims are twofold. First, to make explicit the rationale of the provision of student services, and second, to estimate their costs, to identify the sources of finance and their beneficiaries (I.2).

1. The field of investigation

1.1. Provisional definition

+ Whatever their perspective when analysing universities, economists usually consider only the academic inputs and outputs and the activities directly related to academic functions. Whether universities are viewed as firms, non-profit-making organizations, socializing institutions or any combination of those, it is their instructional, research and in some cases, administrative activities which have been the focus of investigations. Problems of pedagogic quality, questions of efficiency and issues of equal opportunity all require a fairly good appraisal of these core activities.

+ It is not these activities, however, that we will focus on in this essay. Rather, we will turn our attention to the activities which serve students for extra-academic purposes. Most of these activities fall under the generic expression of student services. Although they have been largely neglected by economists until recently, these activities deserve scrutiny. There are many reasons for this, and they will be illuminated as this work unfolds. Two of these reasons, however, can be stated at the outset and without special comment: One is that the activities we are dealing with absorb a substantial part of higher education's resources; the other reason is that in the wake of declining enrollments, decreasing resources and heavier public control over universities, it is likely that higher education will experience changes in both its purpose and its function. In turn, it is reasonable to assume that the first activities to be affected by these changes are those which are the most weakly linked with the conditions of achievement of the academic goals.

+ Now, the meaning of student services must be partially explicated even though it is in the process of the investigation itself that the comprehensive meaning will emerge. The definition proposed here is a tentative and provisional one. We consider student services those

in-kind consumption-oriented non academic services which are produced and operated by universities instead of being bought on the outside market, and which are primarily used by students.

- * Student services along with instructional services are produced under the direct control of universities, operated by them and on the university premises. But unlike instructional services, student services in our definition could be manufactured outside the university, by non-educational agencies. A further point is that those external agencies which could provide student services do not need any expertise whatsoever in educational matters. Conversely, in operating student services by themselves, universities must develop non-academic know-how and implement activities requiring technical abilities and specialized, non-academic staff.

- * As defined above, student services do not include activities that pedagogically, technically or administratively sustain teaching activities. This excludes not only research and libraries, but also all the administrative activities, whether departmental or centralized, which support an academic function; it also leaves out plant operations and maintenance.

- * As far as it is possible and relevant, the student services category excludes those activities undertaken by the universities for non-student populations. This is obviously the case regarding the academic activities provided for adults; but this is also true for non-academic services provided for non-student customers, for example cultural and recreational activities for the community. Indeed, the latter case gives us a good example of the fuzzy border-line that exists between student services and other activities. Some degree of arbitrariness is thus difficult to avoid in this respect.

- * Student services must also be separated from student financial aid. This does not rule out a possible interpretation of student services as a form of aid, but is a reminder that we are concerned only with in-kind activities which take the form of commodities or services. Many links do however, exist between financial aid and student services: The former can be used to regulate access to the latter, and a whole

set of possible substitutions exist between these types of services.

* Student services, as they are analyzed here, are not bound to the way they are financed. Though not a criterion for defining the object of our study, the allocation of financial burden will indeed be an object of investigation.

* The definition which we propose here in reference to a set of issues in fact overlaps both student services as they are generally conceived and auxiliary enterprises. From the conventional student services category, we omit counselling activities directly related to academic matters, orientation activities, internal judicial matters, relations with schools, assistance with study skills, admissions and record activities, and intercollegiate sports. Among auxiliary enterprises, only food and lodging activities respect the definition, which leaves aside a myriad of heterogeneous activities (e.g. reproduction services, police, mailing services, plant services, parking facilities and so on). In some cases, student services as defined earlier might spread to other categories such as public service activities. In short, neither the university decision-making networks nor the budgetary procedures deal with student services as a self-contained, well defined notion. Consequently, there is probably no straightforward and comprehensive method to empirically comprehend student services since they do not constitute a single, homogeneous notion ; moreover, because of this lack of specificity of student services, it is not clear how they can be managed through a general policy.

1.2. Tentative classification

Given the above definition and characteristics, it is now possible to list and classify the main activities falling under the student service category.

(a) Basic needs services

They include : - housing services
- food services
- health services.

Far more important, financially speaking, than any other student services, these activities are also the ones most commonly provided.

(b) Personal counseling activities

These services refer to any kind of non-academically oriented counseling aid offered to students on a personal basis.

Such services include :

- personal advice and psychological help when they are separable from health services
- career planning and placement. Although often personally oriented, these services are also provided for groups of students sharing a common type of professional interest.

(c) Cultural, recreational and sport services

The third cluster of services encompasses various activities, whether collectively or individually consumed by students, that might have some special characteristics, because they all occur in an academic setting. The limits of this category are blurred both because some services of this type are closely related to academic programs, and because many of them are made available for users and customers who are not part of the student community.

(d) Services to student organizations and minorities

Services falling under this heading have in common to be organized at the group level. The group can be either a "minority" (race : blacks, natives... ; gender : women ; national : foreigners ; physical : disabled...) or any organization representing student concerns and interests (unions, sponsored students groups...).

Since our definition is a functional and open one it would not really make sense to propose in abstracto an item-by-item list of services. Generally, institutions of higher education adapt their administrative framework to local needs and functional purposes. On the other hand,

national and aggregate analyses tend to rely mainly upon financial criteria, without functionally separating the relevant expenditures.

The definition used by the Department of Health, Education and Welfare for appraising the amount of funds allocated to student services reads as follows :

"... funds expended for admissions, registrar activities, and activities whose primary purpose is to contribute to students' emotional and physical well-being and to their intellectual, cultural and social development outside the context of the formal instruction program. Examples are career guidance, counseling, financial aid administration, student health services (except when operated as a self-supporting auxiliary enterprise). (1)

It should be noted that the only clear cut criterion in the otherwise loose definition is a financial one, namely the self-supporting nature of auxiliary enterprises which makes them clearly distinct from student services (NASPA, 1976). (2)

1.3. The resources allocated to student services : a national view

At this point our primary aim is to give a general idea of the flow of resources which are diverted to student services at the national level. At this level, we have to rely on aggregate data, which, as already noted, only partially coincides with the activities fitting with our definition. The data are drawn from the tabulations compiled by the National Center for Educational Statistics (NCES). To the student services as defined by the NCES, we need to add that portion of the auxiliary enterprises that corresponds to housing and food services. Only the Current Funds Expenditures are taken into account in the estimations. For 1973-1976, the following amounts (in thousands of dollars) were allocated to student services at the nation level :

Student services (NCES definition)	1,635,797
Food and housing services	2,315,740

Nationally, the first group of services ("soft services") accounted for 4.2 % of all the current funds expenditures and mandatory transfers of all higher education institutions.

Respective proportions were 6.4 % for "hard services" (housing and food) and 10.6 % for the total. According to the same NCES tabulations, and besides instruction expenditures, no other function attracted as many funds.

Data gathered by the National Association of Student Personnel Administration Budget Survey yielded lower levels of expenditures for 1976-77, the average portion of institutional budgets allocated to student affairs, as reported by 262 institutions, was 7.8%. Bias from the sampling and differences in definitions mainly account for this divergence. We also have to recall that both the NASPA and the NCES definitions are more inclusive than the functional definition submitted here. Hence, the figures drawn from these two national sources might represent an over-estimation of the expenditures allocated to the activities fitting the latter definition. In any event, and wherever you set the boundary, the expenditures channeled into student services are by no means negligible.

2. The supply of student services

2.1. Rationale for producing student services

There is not any single answer to the question of the rationale for producing student services, but a convergence of several factors that we will simply list here.

(a) Two possible levels of analysis

Two questions are eligible for the discussion: one is that of the rationale for higher education institutions to *finance* student services; the other is that of the rationale for higher education institutions to undertake the *production* of these services. To recognize that some type of services should be financed by universities is to give to these services a status of inputs. To argue that the services should be a home-production is to make a judgement on the efficiency of their operation. In reality it is not always possible to respect a strict separation between these two levels of analysis.

Another matter of distinction relates to the level of *aggregation* one is talking about :

- individual (student/family)
- institution
- national system of higher education.

There is no guarantee whatsoever that objectives of these agents coincide or even converge.

If this is so, there are even fewer reasons for the production functions to be the same and for the inputs introduced to be identical.

Furthermore, at none of these levels of action does the output have a clear-cut definition. This is a classical situation for a non-profit organization (Weisbrod 1978). Depending on which kind of output one is concerned with, the inputs needed to achieve their production will be quite different: the eligibility of student services to the status of input will indeed also vary. And since each kind of output calls for a particular measurement device, the contribution of any special input - such as student services - to the output needs to be assessed through a special kind of treatment. And so does the estimation of the effectiveness of the contribution to the output (Levin 1976).

For all these reasons, many normative elements are likely to be present in the arguments to be found as accounting for the presence of specific services. By emphasizing our concern at the institutional level, we will reduce to some extent the complexity of the matter.

(b) Student services as inputs in the academic production function

The first and most straightforward reason for an institution to finance and/or to produce student services is that these services contribute, as inputs, to the production of what is traditionally regarded as the university output. Now once this output is said to be of an academic nature, there is no consensus on what it is actually. One reason for this is that the institutional level itself is not homogeneous and should be broken down into: (1) the institution as a whole and (2) the departments or schools or colleges. As it has been argued (Breneman 1976), the objectives of these two levels of action and decision-making might be different, even conflicting. Besides that, the ambiguity which characterizes the academic organization makes it difficult to set up clear objectives (Bienaymé 1976, March & Olsen 1976). But even if we limit ourselves to a traditional notion of the institutional output, that is transmission of knowledge (as translated by degree-granting), it is possible to justify both the existence of student services and their operation by institutions themselves.

Student services are a direct contribution toward academic achievements: even if they are consumption oriented, they represent a *productive* kind of consumption, because they ease student work. A committee on services to students in a private university made the argument explicit:

"Teaching and Research are undoubtedly the central roles of the university from the view point of the professor. Learning is the central role from the view point of the student. We perceive many student services provided through student affairs as vital to the support of those central universities role". (3)

Internally organized, student services might enhance the productivity of academic resources.

One argument for the institution to provide, and to operate student services in this view is that, to fully contribute to the academic output, it is better to control the complete process of production and distribution of these services, rather than to let them depend only upon the fluctuations of the outside market.

Another argument is that by being provided by the university staff, these services are likely to be used more often and more efficiently: for example, students might resort more easily to psychological counseling services if they are immediately available on the premises, and handled by people sharing the university concern and experience than if they are sold by specialists not belonging to the university community. As F. Balderston (1974) puts it, "for many of them (the students) and for the university as an institution, there is no easy and clear point of division between education and the way of life represented by being a student".

(c) Student services and the community

A second step toward the justification of providing and operating student services is to see them as inputs contributing to an output which definition goes beyond a strict academic nature. Universities do not exclusively pursue knowledge transmission but a more humanistic mission which consists not only in giving young people skills but also providing them with the opportunities to develop all their personal potentialities. In a private university, a task force report refers to "the university's commitment to serving the needs of the whole person". A steering committee set up in 1969 at the same institution refers to the university as "a place where people can learn to be more humane". (4)

From this argument, one might easily shift to the community idea: universities are not only a firm but also a place to interact. The community argument, which has also been described as the club membership function of a university (Wang 1975) legitimizes both the availability of student services and their operation by the institution itself. It is especially true of the housing services: "the residence program makes possible a kind and quality of interaction with faculty residents and counselors, teachers, and fellow students that is very different from dormitories run on a hotel model" (Private University Budget Document).

The community argument, which is typically developed at the institutional level, has obvious counterparts in the national or social sphere, namely the socialization argument. Universities have a commitment towards the whole society: this commitment goes much beyond the production of credentials, and it is conveyed by external effects. But for the latter to spill over positively, many non-academic inputs have to be entered. Among these are student services.

"Higher education is seen less in terms of its basic mission and more in terms of its several other roles as a social organization... Today, the targets (of higher education) have multiplied to include healthcare, energy research and development, consumer protection, environmental matters, and many others in addition to the long established areas of governmental concern". (Private University Budget Document).

In that view, student services contribute to the new welfare type of outputs. Alternatively when education is viewed as a process of shaping and molding individuals so that they will adapt to the productive and social world, its output is altogether of a different kind. In this perspective, student services participate in building up homogeneous segments of population.

And since more and more "marginal" strata of the population are concerned with higher education, the developmental needs of the students are both more and more intense and more and more conflicting: student services become instrumental in serving these new needs and in processing these new students (Miller & Price 1976).

(d) Student services, contingency and competition

In many cases, student services are operated on a large scale in and by a higher education institution simply because there is (or there was) a lack or a shortage of comparable services on the contiguous outside market. In the absence of housing available in the neighborhood, construction of residences is not a matter of community or socialization: for the university it is simply a matter of survival. Residential services are just the most obvious example, but a barrel of other services follows: health services, recreational, cultural and the like. Now what was a historical necessity at the time of the first settlement might have survived as a commitment.

By looking at the academic process the other way around, one can see students as a source of resources, which indeed they are, to a variable extent (O'Neill 1973). In the highly competitive market of universities, institutions try to attract students. In addition to the academic quality of the curriculum, other activities such as student services might be considered a good device to mark the distinctiveness of an institution. For instance, career planning has been explicitly seen as a possible response of institutions to recruitment problems (Hillery 1978). The validity of the argument, however is closely related to the extent to which the services are financed by the students or subsidized by the institution through other sources of funds.

This issue leads to a third possible line of argument, equality of opportunity. Making available basic and social services from housing to cultural activities for those students who would be otherwise deprived of them is then a "normal" aim of universities. This argument, it should be noted, is again very tightly linked with the financial aid policy: the power of student services to be "positively discriminating" depends upon the way these services are financially available.

As direct contributors to instructional output, as instruments of its broadening within a social mission or as responses to historical and local deficiencies, students services also have many *raison d'être*. Whether the total development of the person or the mere need to be (economically) successful is sought, student services can be a decisive help.

Many higher education institutions do not provide any services beyond the academic ones, however, which shows that the operation of students services remains the result of an affirmative choice.

2.2. Costs, Benefits, and Transfers

The growing need for personnel services is paralleled by their equally rising costs (Fenske 1980). This is why (like for any other activity), more has to be known on what is actually spent in the name of these services, by whom, and for whose benefit. Clarification of these basic financial relations should help both the managers and the users of student services to strengthen the accountability of the services, and eventually, their efficacy.

2.2.1. Resources and expenditures

The first and the simplest facet to be looked at is the amount of resources allocated to student services. This amount can be related either to the sum of student services or to each set of services making up a category such as those defined earlier. In both cases, one has to go through each activity as it is defined in each institution, which raises the problem of the identification of the service and that of the divisibility of the resources allocated to it.

Expenditures figures are not really informative on their own and they should be considered merely as the basic data necessary for the calculation of costs and charges. To become meaningful, they have to be related either to the quantity of the service, to the number of payers or to that of users.

Besides their monetary expression (expenditure) resources allocated to student services may be seen through their labor component, that is through the amount of full-time-equivalent (FTE) personnel committed to the operation of student services. Relying on this expression obviously does not alleviate the identification and the divisibility problems. Let us discuss the latter from two different stand points :

(a) Student services in the decision-making structure

Decisions and management relating to student services seem to be located somewhere at the intersection of three sources of responsibility : (1) student service personnel as such, (2) various officers at the department level, (3) officers in charge of auxiliary enterprises. The first cluster of administrators generally report to a "Dean for Student Affairs" or a "Dean for Campus Affairs", who might, in some cases, be ranked as a vice-chancellor. The role of these administrators in the decision-making process is appportionate to the degree of centralization of student service activities. The organizational context of student services management has been fairly well documented (Miller & Price 1976 ; Dutton & Rickard 1980) and there is no need to emphasize this aspect here.

Finally, the way student services are administered can be affected by students themselves through their organizations. In most cases, the latter are associated to the activities sponsored by the school administrators.

(b) Students services in financial structures

What has been noted at the organizational level obviously holds true at the financial one. It is very seldom that a unique administrative body handles a complete budget for the whole range of student services. The most common pattern is one budget for the soft activities and another one for auxiliary services. Departmental student services often have only implicit costs when they draw on resources elsewhere used. Auxiliary enterprises, are specific in this sense that they are often financially self-contained and recover their full operating costs by an adequate pricing.

The main problem then concerns soft services when one tries to assess the expenditures allocated to each function or each type. Such an assessment is a pure fiction when, as it often happens, there is no direct and explicit allocation of funds on a functional basis. A further obstacle in estimating student services outlays is that they are often financed through various channels from various sources (private vs. public; permanent vs. temporary; restricted vs. unrestricted; general vs. designated; federal funds; tuition and fees; endowment funds, etc.). All these difficulties lead to a succession of approximations; and even if estimations have some consistency within the framework of one institution, they might become quite fragile when used for comparison between several institutions.

Finally, it should be noted that we are dealing with operating expenditures exclusively and that the following estimations do not include capital outlays either directly (new plants' operations) or indirectly (amortization).

2.2.2. Unit costs

Relating total costs of student services to some kind of unit is the necessary step toward understanding of the efficiency of the production, although cost differentials might mean a lot of different things, in addition to mere differences in efficiency (Levin 1976). It is only if we know the total cost of two identical activities in two different institutions that we are entitled to comment on efficiency differentials: rather say that such a condition is very seldom met. But even so, unit cost figures enable a sound description of how resources are spent among various activities. There are several kinds of units which total expenditures can be related to, depending on what one is interested in looking at. Units can pertain either to a population (of students) or to an activity. And in each case, unit costs can be thought of for all services or for one kind or one cluster of them, or even only one. To make it simpler here, we will consider only the dichotomy one/all.

Let's have:

The set of activities is $M(1 \dots i \dots m)$

The total student population is $P(1 \dots j \dots p)$

The total user population is $N(1 \dots k \dots n)$ and $N \subset P$

Table 1. Framework of Unit Costs

	All activities	Activity i
Per student	$CAS_j = \sum_i E_i / P$	$CAS_{ij} = E_i / P$
Per user	not relevant	$CAU_{ik} = E_i / N$
Per potential user	not relevant	$CAU'_{ik} = E_i / N'$
Per activity	not relevant	$CAA_i = E_i / A_i$

Then, starting with the total expenditures for student services ($\sum_i E_i$) or with the expenditure allocated to one of them (E_i), one can build up the following sequence of unit costs (Table 1.).

(a) The average per student cost (CAS) is obtained by dividing the expenditures by the total population of students in the institution (P) regardless both of who pays for the service(s) and who uses it (them). CAS is not analytically very helpful, and only gives an order of magnitude ; it can be used either for total activity (CAS_j) or for one of them (CAS_{ij}). In some cases, it might be preferable to consider only the *undergraduate* population for calculation of average per student costs, specially in a comprehensive and comparative study.

(b) The average per user cost (CAU_i) relates the outlays to the number of users of student services. Because each service is used by a specific population of users. It is preferable to calculate a per user cost at the level of one activity (CAU_{ik}). At this level, CAU is the most meaningful of all the unit cost indexes. If $r = N/P$, that is the user ratio, there is an obvious relation between CAU and CAS, i.e., $CAU_{ik} = r.CAS_{ij}$.

(c) A possible alternative version of CAU is the average per potential user cost (CAU'_i) which relates E_i to the size of the target population (N') which is by nature eligible to the use of the service ($N \leq N' \leq P$). Determination of N' is sometimes straightforward (e.g., women population), but in other cases, not even possible (sport lovers). CAU' might be of some interest for management and development purposes, when compared to CAU.

(d) Finally, it is possible in some cases, to estimate the average cost per activity cost (CAA_i) which, by definition, refers to one activity only and is the ratio of E_i to the quantity of the service (A_i). It is trivial to state that CAA_i cannot be used to compare two different activities since they are measured with different physical units. CAA_i is combinable with user costs (CAU_i), to which it is equal when one student uses one unit of the service (e.g., one meal, one room).

2.2.3. Burden

Just as unit costs might represent an approximation of the benefits received by students, so we have to identify the burden they bear, because of these services or for the sake of them. In this respect, we are concerned with only two sources of funds: students vs. other sources. Calculation of the student's share should be helpful for two sets of questions: (i) what is the internal pattern of financing, and more particularly, what is the respective situation of users and non-users and (ii) what is the respective situation of students using one service and non-students using the same service on the outside market ?

Because of the many different ways of financing and pricing student services, one has to consider several cases and investigate whether both the service and the users are clearly linked by one particular flow of resources. To put it another way, it must be known first whether the payers are users and second whether the student's part is allocated to any specific service (Table 2.).

Table 2. Framework of Unit Charges

	What ?	
	All activities	One activity i
All students (P)	$BAST_j = \sum_i F_i / P$	$BAS_{ij} = F_i / P$
Who ?		
Users (N)	non relevant	$BAU_{ik} = F_i / N$

The following cases might occur :

(a) There is no global allowance for student services as such, and no direct indication of how to know to what extent students pay for these services. This might be the case in a private institution if a global fee is charged, which includes coverage of instructional services as well as other services. It might also happen in a

publicly subsidized college: then, in the latter case, from the distribution of tax payers, it could be possible, with some guesswork, to reach an approximation of the average students' families share in financing student services.

(b) The total amount of fees paid by students for all student services ($\sum_i F_i$) is known. By dividing this package by the total student population, one has an expression of the average per student total burden ($BAST_i$). In that case, indeed, there is no separation between users and non-users, and no allocation to any specific service. This pattern of financing student services follows a logic of "risk solidarity" similar to that of a Social Security System (provided that $\sum_i F_i$ is not too small relative to $\sum_i E_i$).

(c) All students pay for all student services and there is a breakdown of their total fees by the different services (F_i). It is then possible, by dividing the student funds for one activity, to know the average per student burden for that activity ($BAST_{ij}$).

(d) Each user pays for having access to any particular service. In this case, there is a direct link between one service and one student and also full information on that link. And if $F_i = E_i$ it is simply the fee-for-service system which identifies the two sides of the allocative process. Dividing the total student fees for one service by those (the users) who contribute to the fees yields the average per user burden (BAU_{ik}). Actually, like in the previous case, the direct information about the unit burden might be available, without going through the total fee figure.

It should be emphasized that in reality, what we observe is a combination of these cases. In particular, "soft" services are generally priced along the lines of (a), (b), or (c), while auxiliary enterprises are quite often managed on a fee-for-service basis.

2.2.4. Transfers

Assuming that we know how much of the cost of student services is borne by each constituency, the next step of the analysis is to put together the costs and burden figures and provide expressions of the net benefits. Net benefit figures are especially interesting when - like in the case of student services - the cost and the use of an activity is shared by several distinct units. The confusion in the pattern of financing and utilization of student services stems from the very nature of the services, and there is nothing wrong about it. What it calls for, though, is a clarification of the roles and an explicitation of the financial flows: this will be achieved by putting face to face the sources of resources and the destination of the services. As to approach this "who pays? who benefits?" issue, it is then necessary to try to identify for each service, the subpopulation of those who finance it, and the subpopulation of those who make use of it.

Although it is a straightforward type of question, our tools to give answers are quite limited and awkward, because of the complexity of the patterns of financment which change (in a given university) from one service to another one. Keeping in mind the speculative character of the transfer expressions, they would take the following forms:

(a) No global allowance. In this case indeed, net benefit calculations are not conceivable. Student service values and burdens are sunk in total educational benefits and costs.

(b) There is a total student allowance for all student services. Then the net benefit for the entire student population is $(E - F)$ and the average per student net benefit for all student services is:

$$TST_j = CAST_j - BAST_j = (E - F)/P$$

It is not possible to make any distinction according to the service and by users and non-users although such a system obviously generates transfers between users and non-users. However, the value of TAST might be compared among institutions.

(c) All students pay a general fee the allocation of which to the various services is known. If, although users and non-users of a service i are not discriminated at the financing level, we assume that we know how many students are consuming the service i (N), then the following net benefits may be computed:

$$(1) \quad E_i = F_i$$

- The average net benefit for the non-user group is

$$TS_{i,j-k} = - (E_i/P) \text{ per student}$$

$$\text{and } \sum_{j-k}^{P-N} TS_{i,j-k} = -E_i \cdot \frac{P-N}{P} \text{ for the non-user group as a whole.}$$

- The average net benefit for the user group is

$$TS_{i,k} = E_i/N - F_i/P, \text{ which, because } E_i = F_i \text{ becomes}$$

$$TS_{i,k} = E_i \cdot \frac{P-N}{PN} \text{ per student,}$$

$$\text{and } \sum_k^N TS_{i,k} = E_i \cdot \frac{P-N}{P} \text{ for the user group as a whole.}$$

- The total net transfer between the two groups might be expressed

$$\text{as } \sum_k \sum_{j-k}^{P-N} TS_{i,k,j-k} = E_i \cdot \frac{2(P-N)}{P}$$

- If reported as the sum of the resources channelled to the operation of service i , that is to the sum of costs and benefits related to i , then the net transfer between the two groups can be rewritten as an index:

$$= E_i \cdot \frac{2(P-N)}{P} / 2E_i = 1 - \frac{N}{P}$$

In this case, the index of transfer does not depend on the amount of costs and benefits, but only on the proportion of users in the total student population.

c_i varies between 0 (that is $P = N$, all students are consumers) and 1 ($N = 0$, there are no users).

$$(2) F_i < E_i$$

- The average net benefit for non-users is:

$$TS_{i,j-k} = -(F_i/P) \text{ per student, and}$$

$$\sum_{j=k}^{p-n} TS_{i,j-k} = -F_i \frac{P-N}{P}$$

- The average net benefit for users is

$$TS_{i,k} = E_i/N - F_i/P \text{ per student,}$$

$$\text{and } \sum_k^n TS_{i,k} = E_i - rF_i$$

- Total transfer between users and non-users is given by

$$\sum_k^n \sum_{j=k}^{p-n} TS_{i,k,j-k} = E_i + F_i(1 - 2r)$$

Expressed as a ratio to the twofold flow of resources involved in providing the service i (that is $E_i + F_i$), this expression gives an index of transfer.

$$c_i = 1 - 2r \frac{F_i}{E_i + F_i}$$

This index indeed encompasses the particular case of $E_i = F_i$

if $N = 0$ (no users), then $c_i = 1$

if $N = P$ (all students are users),

either $E_i = F_i$, then $c_i = 0$

or $F_i = 0$, then $c_i = 1$

In this case, then, the relative transfer between users and non-users depends both on the ratio between the population of these two groups and on the respective value of the total cost of the service and the total burden borne for it by students.

(d) Users of the service only pay (partially or totally) for it. The main question becomes: that of the net benefit users may receive:

- If $E_i = F_i$, then $TAS_{i,k} = 0$
that is costs and burdens are equalized through prices.

- If $E_i > F_i$, then $TS_{i,k} = \frac{E_i - F_i}{N}$

$$\text{and } \sum_k TAS_{ik} = E_i - F_i$$

A positive net benefit occurs as soon as the value of the service exceeds the fee paid for it. The missing part of the cost might be made up for either by non-user students or by the university general funds.

(e) Transfer per potential user can only be estimated provided additional assumptions are made regarding the way potential users would be charged. Once these assumptions are set, calculations follow one of the forms presented in the case of per user transfers.

(f) There is no point in estimating per activity transfers unless the activity is related to either the entire student population or the users, which then becomes equivalent to the calculations presented above.

x x

x

Loosely defined, very unevenly distributed among institutions, "student services have emerged and evolved by default" and they now are "in the peculiar situation of being indispensable but peripheral" (Fenske, 1980). The objectives of these services have to be spelled out as clearly as possible, if they are to be preserved in a time of shrinking financial possibilities. Likewise, a framework has to be developed to assess the financial efforts which have to be accepted for a given quality of these services. As far as the objectives are concerned, there is no lack of good reasons to provide student services. Now, it remains to shed some light on the means.

II. FINANCING AND USING STUDENT SERVICES : TOWARD ESTIMATIONS

At this point, we need to shift from a speculative stage to an empirical one, and investigate how money actually goes to student services, how it is spent and who takes advantage of these services. To our knowledge little, if anything, has been done at this stage. The ambiguity of the status of student services is probably to be blamed for this empirical deficiency. After having recalled the rationale for student services, let us try to delineate the monetary aspects of the operation and distribution of these services.

To substantiate the costs, finance and net benefits of student services, a cluster of institutions has been selected. After these institutions have been specified relative to other higher education institutions (II.1), we proceed to the financial analysis of student services (II.2). Then, coming back to a broader empirical basis, we suggest some guess-work about the possible future of student services in the light of what has been learned from recent changes in the provision of these services (II.3).

1. Four cases studies

The bulk of our information on both cost and evaluation of student services is gathered from four universities selected on a convenience basis, not on a representative one.

Grosso modo, all four institutions are part of the highest segment of the university system in the U.S., two of them at least are pace setting normative models. Therefore, they are not representative in terms of student services since, by and large, the four of them devote relatively more resources and attention to these services than the average. This is a deliberate bias in our choice which follows a common sense strategy : focus on what you are interested in describing. Being interested in student services, we review

institutions where these services are fairly developed, i.e. where there is enough raw material to be observed.

A general picture of the settings of the four universities reviewed is necessary for an understanding of their respective efforts in providing student services.

Two of these universities are located in a Western State and two others in a Middle West State. In each case, one is publicly controlled and one is privately run. (Table 3 shows the coding system used hereof).

Table 3. The four institution's codes

	Private	Public
Western State	WA	WI
Middle West State	MA	MI

The two public institutions are both bigger in terms of enrollment (Table A.1) and more oriented toward undergraduate training (Table A.2) than are the private institutions. They are also less selective than their private counterparts in admitting applicants (Table A.3). In the two private institutions, the output in post graduate degrees is bigger relative to the output of BA/BS degrees than it is in public institutions (Table A.4).

Although information is not complete in this respect, WA is doing the best in terms of minority enrollments (Table A.5). Another characteristic of WA is that it is the most residential of all the four campuses considered (Table A.6).

As far as resources are concerned (Tables A.7 and A.8), the bigger the university, the less money is "necessary" for training each student.

As one would expect, private institutions rely much more than public ones on tuition and fees in making up their total current fund incomes (Table A.9).

Finally, a general perspective on how students pay for services is helpful for a better understanding of the cost figure.

-In the two public institutions, student fees are broken down into three items : tuition, service fees, meals and housing.

The aggregation of the service fees paid by all students represent the overwhelming part of the budget for soft student services at WI and the majority of this budget at MI.

-At WA and MA, the two private universities, service fees are collected with tuition fees, and it is not known how to reconstitute the part of these total fees allocated to student services.

-In all four institutions, students pay for food and room services. It is a fee-for-service system, although some disparities might occur between the real cost and the charge.

-Health services : no separate fee at WA and MA (the cost though, is included in total tuition fees); flat rate (per student) at WI and MI; health insurance is compulsory at MA and MI.

-The bulk of the other services is not directly charged for in the private institutions, and is covered by a flat per student service fee in the public universities.

Besides the data directly collected from the four institutions just described, information was also drawn from two separate surveys: one has been conducted by the Committee on Financing Higher Education (COFHE, 1976); the other actually consists of a review of three successive surveys conducted by the National Association of Student Personnel Administrators - (NASPA, 1977, 1978 and 1979). Both of these surveys specifically focus on student services, and moreover, our four selected universities have been covered by one of them.

With this information, we will now survey each group of activity, scrutinize their performance in terms of costs and report the evaluation users make of the services. Estimations relate to 1975-76 / 1978-1979 period.

2. Use and price of four types of services

2.1. Basic needs services

2.1.1. Food and housing

Food and lodging are usually joint activities, and most on-campus residences provide some kind of catering. Students then pay different fees, even within one institution, depending on which kind of accommodation they choose, and which meal plan they pick. Because of this source of variation, annual per user costs and per user charges stay in a relatively wide range from \$ 1500 to more than \$ 2000 (Table 4). Food services account for about 60% of the total expenditures for this set of services. Prices (costs and fees) also vary within one university according to the type of accommodation (from one bed in a dormitory for single freshmen to a three-bedroom apartment for married graduate students with their children). Costs and charges also vary substantially (MA), but net benefit calculations are never possible, either because there are other incomes than fees or because food and housing fees pay for other services. In all cases, the real per user burden is lower than what would have to be paid for "comparable services" off campus. Besides, whatever financial aid students might receive, they also get a subsidy by using on campus accommodation, even when they pay a fee for the service. The subsidy can be interpreted as the consequence of returns to scale. The magnitude of the subsidy would be the difference between the fee charged and the average price which would be paid for comparable services on the outside market. The meaning

of the subsidy would be limited by the fact that on-campus housing generally pretends to be qualitatively much more than a mere substitute for an off-campus accommodation.

Housing is a kind of service which is generally used at 100% of its capacity, in some cases more. Although H. Bowen (1978) reports that the proportion of student living in institutional residences has declined as a result of the emancipation of youth, demand for residences in the institutions reviewed is still strong and supply in some cases falls behind it. A full capacity operation can mean outstanding "quality" of the services offered as well as a shortage on the outside market for housing. WA for instance, combines the explicit objective of housing all undergraduates and making up for exorbitantly high rents for privately owned rooms off-campus. "The residential arrangements that the university affords have a considerable capacity for either increasing or diminishing the ability of students to educate themselves and each other" (WA document).

Residential education at WA, a "soft service associated with housing" is considered a "focal point of the student experience". It is currently financed out of general funds and the committee on student services at WA expressed the view that it would be better to maintain such a system so as not to reduce the funds available for this service. Residential education is just one of the examples of the variety offered by this type of service. The size, the architecture, the accommodation, the kind of community life are other factors which make it so difficult to make any sound, "objective" appraisal of the relative quality.

2.1.2. Health services

Health services are also characterized by a wide spectrum of activities ranging from one nurse to comprehensive medical facilities. All four institutions, however, provide the latter kind of services, but funding and pricing widely differ.

Table 4. Basic Needs (Food, Lodging and Health Services)
-Financial Description

[1] Food and Lodging

WA

$E_i(1976-77) = \$8,912,900$

$CAU_{ik} = \$1340$

$BAU_{ik} = \$1600$ (fee)

TS = not relevant because food and lodging fees are used to finance other services

[2] Health Service

$E_i(1976-77) = \$1,115,000$

$CAS_{ij} = \$90$

$CAA_i = \$19$ (per student-visit-cost)

FTE = 135

[1] Food and Lodging

WI

$E_i(1976-77) = \$5,588,000$

$E_i(1977-78) = \$6,306,600$

$CAU_{ik} = \$1,560$

$\$1780 < F_i < \$2110$ (Fee)

[2] Health Services

$E_i(1978-79) = \$1,785,000$

$F_i(1978-79) = \$2,634,000$

$CAS_{ij} = \$131$

$BAS_{ij} - BAU_{ik} = \$91$ (fee)

$CAU_{ik} = \$227$

$TS_{i,j-k} = \$-91$

$TS_{i,k} = \$2$

$t_i = .52$

[1] Food and Lodging

HA

$E_i(1976-77) = \$4,683,000$ $E_i(1978-79) = \$5,145,500$

$CAU_{ik} = \$1,510$

$CAU_{ik} = \$1,750$

$BAU_{ik} = \$1,980$ (fee)

$BAU_{ik} = \$2,310$

TS = not relevant because of fees-mix-up

N for housing = 3,100 students

E_i includes residential education (\$330,000 in 1975-76, COPIHE estimation)

[2] Health Services (including Psychiatrist Services)

$E_i(1976-77) = \$563,000$

$E_i(1978-79) = \$626,000$

$CAS_{ij} = \$73$

$CAS_{ij} = \$80$

$CAA_i = \$24$

$CAA_i = \$27$

CAA_i represents a per student-visit-cost

Student fee for student health services is part of the tuition charge - BAU_{ik} unknown

Compulsory Health Insurance charge = \$90 (1976-77)

\$135 (1978-79)

[1] Food and Lodging

HI

$E_i(1978-79) = \$25,059,000$

$CAU_{ik} = \$1,970$

$BAU_{ik} = \$1,900$ (fee)

[2] Health Services

$E_i(1978-79) = \$2,608,000$

$CAS_{ij} = \$80$

$BAU_{ik} = \$80$ (fee)

Compulsory Health Insurance charge = \$38

FTE = 146

(a) Costs

Most of the time, students do not pay for health services on the basis of their use of the services, and the students' contribution is not the only source of income for keeping the services at work ($F_i < E_i$). In our "sample", two institutions have a flat-fee-system (WI and MI) while fees are "hidden" at WA and MA. The per student cost of health services falls into a relatively narrow range from \$80 to \$130, and the per student-visit costs in WA and MA are very close to (\$20). Per student-visit costs at WA are estimated to be lower than those outside, by a margin of 10 to 20%. Data gathered at WI make it possible to exemplify the method suggested to estimate the transfer between users and non-users (Table 4.). Because the fees paid are close to the per student cost and because the users' population is large relative to the total student's population, the per student net benefit incurred by each user is quite low ($TS_{i,k} = \$2$) and the relative transfer between the group of users and the non-users groups is not very significant ($\tau_i = .52$).

(b) Running a health center with appropriate services on the campus premises can be rationalized from the size of the population living in a university: the size justifies the existence of such a service and allows scale economies. A student-faculty report submitted to the WA President contends that "Having a health service on campus is not only a valuable convenience; for many students on campus health services is a necessity". It goes on to state that "(WA) health service allows students to enjoy the benefits of group saving and group efficiencies in an age group which on the average has the lowest health care needs". In all four institutions, health services go beyond diagnostic and care: they also include counseling activities.

A review of students' evaluation of the services available on the WI's campus shows that almost 60% of the students use the health center for medical problems not requiring hospitalization (there is no medical school at WI). Half of the graduate women use the information services concerning birth control, sexuality, etc., and a third of the students follow the center's attempts at health education.

The WI survey introduces a difference between the use of services and their ranking (by both users and non-users).

Medical services (not requiring hospitalization) are ranked fourth in order of use and second in order of importance (Table A.10). A survey at WA reports that health services at WA "are valued relatively high by students". Students at WA pay 3.7 visits a year to the health center and 2.9 visits at MA. These figures suggest a heavy use of the service especially when one remembers that students constitute an age group which on the average has low health care needs. Again, intensity of use, when there is no fee-for-service pricing might be ambiguous: at the extreme, one could argue that the heavy use of health services which are paid for at a flat rate reflects overconsumption.

Interestingly, students paying a flat fee for health services (WI) favor the fee-for-service basis while those who do not know which portion of their total tuition fee is going to health services (WA) strongly oppose the idea of charging students for these services. Such a situation might be seen as an illustration of the tendency not to reveal preferences concerning public goods.

2.2. Personal counseling

Among "soft services", counseling activities are certainly prevalent in all four institutions. After the interviews which have been conducted with the chief officers in charges of student services, it seems to us that "model" universities do not undervalue personal services as it has been already stated (Fenske, 1980: p.46). Rather, these universities have added to the traditional commitment of producing highly competitive managers, the more recent commitment of integrating the scholar and the social being. By emphasizing their egalitarian aims and "affirmative action" vocation, these universities have accentuated even further the necessity of providing diverse personalized guidance devices. These devices encompass career planning services, psychological services, housing aid and residential education.

(a) Reasons for and intensity of use

Career planning and placement. Job placement is deemed to be "an essential end-product of a WA education that can seriously disrupt the student's last year if appropriate assistance is not provided". 6,500 student interviews have been processed by the Placement Center at WA (and 5,400 at the School of Business) and 18,000 Placement files were sent out in 1977-78. The Center also runs career planning activities which have been attended by a third of the students. In the four institutions, the placement office does not limit its services to keeping up job offer files, but they assist students to find part-time and summer jobs on and off campus; they also advise students in job search techniques. At WI, information on the job market is ranked 9th according to percentage of use but first in order of the highest mean importance. This tends to support the argument already mentioned that career planning services might be a means of maintaining enrollments, especially in a period of tight labor markets. The argument should not be pushed too far though, because freshmen are not likely to take into account this type of service when they apply.

Psychological services. At WA, the priority order ranking of the activities considered most important by the committee on student services is:

1. Emergency consultation and crisis intervention
2. Consultative work with residence staff
3. Consultation on personal problems.

How "well" these activities are operating is indeed a difficult question: "human services such as ours are difficult to evaluate. Even with broad agreement as to the goals of the activity, there can be ambiguity about what to evaluate", recognizes the Director of the counseling and psychological services at WA. Nine percent students have been seen annually through direct services, and the average per client number of visit is stable at around five per year. Similar services were used by about 10% of the student

population at WI. But none of these figures tells whether the needs are successfully met: intensity of use of services like these might again mean a number of things: higher needs among the student population/higher *perceived* needs/better confidence in the service. Interestingly, WI students, even those who use these services, do not rank them very high in order of importance, while a WA survey reports that the services are "evidently valued" by WA students. Leaning towards one of these two directions without other information is more a matter of value judgment. As seen by those who run psychological services at WA, the interpretation is rather positive: "The service serves to help, back up, and make more effective the traditional relationships within the academic community".

Housing aid, i.e., counseling for off-campus housing is widely used by WI students: 56% resort to current listings of available off-campus housing. The WI housing office handles over 11,000 listings a year and the "traffic" is estimated at around 80,000 visits. If one considers only the "concerned" population, that is the subset of students living off campus, then the proportion of users reaches almost 80%, which is considerable. Since, on the other hand, the service is ranked high in order of importance, housing services in this university appear to meet their purpose.

Residential Education is what makes on-campus housing so radically different from regular off-campus housing. A report signed by all concerned constituencies at WA states that residential education is "essential if we are to offer students optimal living situations". Student staff and resident fellows (1 to 30 to 1 to 50 by student) have educational, social and administrative responsibilities and provide a permanent liaison between students; they also do personal advising.

Personal counseling at large seems to be quite appreciated by students. At WA, students rate career planning services and health services as the services they would allocate the more tuition dollars to "from the stand point of their own personal needs." (5)

(b) Costs and charges (Table 5)

At WA and MA, personal counseling services are rarely priced on a fee-for-service basis; there is a technical reason for this, i.e. the fact that these services are rarely a budget-line-item and that many different people (faculty, staff, fellows) participate, some in a non-sizable way, in the activity. There is also another reason, stemming from the fact that the high demand by students seems precisely sustained by the type of financing the services are based on. It is likely that the demand for the services is highly elastic relative to any upward shift of the price. As a matter of fact, the "price" is known only at WI; in other institutions, there is no direct allocation of the general tuition to these particular services.

The per student costs average around \$20 in the case of career planning and placement services, and lie in a \$15 to \$40 range for psychological services. The latter provides an illustration of a clear net-benefit flow towards the user population: (at WI) while the flat fee for the service is \$30, the value of the service for the user is \$280, which leads to a per user transfer of \$250. Since $E_i = F_i$ and since N is small relative to P , the total transfer between the non-users and the users is substantial ($t_i = .90$). These figures account for a good part of the desire expressed by WI students to finance counseling services on a fee-for-service basis: knowledge of this type of transfer leads the majority of the non-users to reveal their preference in a direction opposite to the one taken by non-users in other universities who do not know the cost of these services (WA and MA). This discrepancy enlightens the type of issue that any social security system based on a solidarity principle has to face.

Table 5. Personal Counseling -Financial Description

WA

WA

	E_i	CAS_{ij}	CAU_{ik}	FTE
Career planning ¹	300,000	24	n.a.	n.a.
Counseling and psych. services	315,000	26	290	n.a.
Residential Education ³	482,000	39	96	190 ³

Data are for 1975-76

¹ Counseling in academic departments not included² COPHE estimation concerns undergraduates only³ in number of persons

Career Counseling and Placement

 $E_i(1976-77) = \$146,700$ $CAS_{ij} = \$19$ $E_i(1978-79) = \$170,000$ $CAS_{ij} = \$22$

Residential Education

 $E_i(1976-77) = \$330,000$ (COPHE estimation) $CAS_{ij} = \$43$ $CAU_{ij} = \$106$

Note: each professional school has its own counseling center
No personal counseling as such

60 Residential advisers

VI

	E_i	BAU_{ik}	N	CAU_{ik}	$Tb_{i,k}$	FTE
Career planning	756,700	29	9,600	79	50	45
Counseling and psych. services	771,700	32	2,700	285	253	40
Housing	156,800	5	2,700	58	53	68 ²
Stud. Infor. Center	269,700	10	11,800	22	12	18

Data are for 1978-79

¹ $BAU_{ik} = BAS_{ij}$: users and non-users pay the same flat fee² Includes the staff in charge of child care services.

HI

	E_i	CAS_{ij}	FTE
Career and placement	117,300	3	15
Counseling	543,900	16	19
Housing	1,495,000	44	229 ¹

Data are for 1978-79

¹ This figure includes resident fellows

In addition, individual colleges and departments sponsor their own job placement programs for majors.

2.3. Student organizations and minority services

Truly, under this headline, many distinct items can be thought of, which are not always identified or even clearly isolated from other groups of services. The most significant services to be found in our case studies cover child care services, physically disabled students programs, foreign student services and the activities of students associations.

Typically, these services are underestimated, even in institutions where they are centrally managed. Faculty and staff often devote some portion of their time to informally advising members of minorities and student organizations (Table 6).

(a) Child care. Each student at WI pays a flat fee of \$20 in a contribution to the cost ($E_i = F_i$) of child care services. The service is used by 5% of the total student population, which means that the target population (N') heavily resorts to the service. The group of users receive a total net benefit close to twice the amount of total costs

$$E_i = \$460,000 ; \sum_k \sum_{j=k}^{n, p=n} TS_{i, ki, j-k} = \$875,000 \text{ and } c_i = .92$$

No wonder, under these conditions, that the service is often mentioned by students as one to finance on a fee-for-service basis. More surprising is the fact that both women and users do not rate the service very high on the scale of importance: here again, divergent interpretations could be sought on the "efficacy" of student services. In the particular case of child care, it might be that, whatever the quality of university-operated services, the off-campus similar services are probably either scarce or worse.

(b) In financial terms, the picture is very much the same for the Physically Disabled Students Program, although the flat-fee for these services is only \$4 per student. In terms of evaluation, though, it is quite different, and in spite of substantial transfers,

the service (intensely used by the target population) is ranked important both by users and non-users. This case exemplifies how much the efficacy of a service in an institution of this sort is dependent on its "social desirability".

(c) Foreign Student Services are both used by the overwhelming majority of the target population and by important groups of American students. Per user costs at WA and WI are close to \$80 while the flat-fee paid at WI reaches only \$6, which yields a significant flow of net benefits. This service, however, is not highly evaluated by students at WI.

Any comparison with the costs of similar services on the regular outside market is hampered by the fact that there are virtually no institutions that offer comparable services. Foreign Student Services in universities deal with activities ranging from immigration problems to cultural programs and to advising on a wide range of matters.

(d) Observations concerning student group activities are scarce and impressionistic not only because of the diversity of services, but also because of the variety of patterns of financing and because these activities overlap with many other activities (cultural events, services for minorities, etc.).

WA supports several student organizations from its general funds: the WA Student Association, Black students, different clubs, a broadcasting station, etc. The support might be purely financial, or it can include financial allowances and counseling; it is often a combination of these two forms. By and large, 150 student groups make use of this support at WA. This university also supports a Student Center which provides food service, a ticket office, travel services, recreational facilities and a small store. Since selling services in this center is a source of income, this activity might be seen as a subsidized commercial operation. This

Table 6. Group and Minority Services : Financial description

	E_i	CAS_{ij}	CAU_{ik}
Foreign students	170,000	14	76
Campus Affairs	155,000	13	n.r.
Union Center	337,000	28	

Figure are for 1975-76.

Student Activities

MA

$E_i(1976-77) = \$178,600$

$CAS_{ij} = \$ 23$

$E_i(1978-79) = \$193,000$

No separate Office of Minority Student Service.
No Office for the handicapped. But counseling minority students and disabled students is carried out by the various deans of students in each academic area

	E_i	BAU_{ik}^1	N	CAU_{ik}	TS_{ik}
Foreign students	166,400	6	2000	83	77
Women Center	147,400	5	2700	54	49
Child Care	460,600	19	1400	335	316
Physically Disabled st.	115,500	4	400	304	300
Stud. Activ. and Programs	240,000	9	n.a.	n.a.	n.a.

Data are for 1978-79

¹ $BAU_{ik} = BAS_{ij}$ = Users and non-users pay the same flat fee, the "Registration Fee".

	E_i	CAS_{ij}	MI
Foreign students	64,900	2	
Handicapped serv.	1,080,000	32	
Minority Affairs	257,400	8	
Activities	229,800	7	
Union Center	1,390,000	41	

situation indeed generates much concern and sometimes conflict about the norms of efficacy, which are not always interpreted along the same lines by each constituency. But these are internal problems, specific to each university, and they are not amenable to comparative statements. WI, MA and MI also provide services to registered student organizations, at a per-student cost which vary from \$7 to \$23.

Student activities and programs at WI (25 FTE) include :

1. Student programs strictly speaking.
2. Student musical activities.
3. Physically Disabled Students Program.
4. Community Service projects.

Component number 3 has been pulled out of this set and reviewed separately above. Component number 2 will be treated in the next category of services. Component number 4 is not retained at all. As far as component n°1, the only one left here, it "is concerned with offering opportunities to students to complement their academic experiences through participation in various extra-curricular activities and programs" (WI document) and it includes :

- administrative relations with student groups
- operational support of student groups
- assistance to student activities.

2.4. Cultural and recreational activities

Cultural and recreational activities are probably the most ambiguous type of services we have to deal with ; the reason for this is that these services are still administratively, financially and conceptually very much entangled with other (especially academic) activities.

These services are the most heavily used student services at WI, although none of them is considered among the top priorities by students (Table A.10). Does this reflect a contradiction or a "bad" functioning of services so intensely used ? It might just as well

Table 7. Recreational and Cultural :
Financial description

WA

	E_i	CAS_{ij}
Cultural programs ¹	68,000	6
Recreational sports	217,000	18

¹ Figure are for 1975-76

MA

No separate Budgetary item for Cultural Services.
They are sponsored by academic units, student groups
or residence hall groups.
Financial support is spread throughout many units

Recreational Sports cannot be separated from
intercollegiate athletics or physical education activities.
All these activities constitute the Budget of the
Department of Physical Education and Athletics.

WI

	E_i	N	BAU_{ik}^1	CAU_{ik}	TS_{ik}
University Art Center	806,700	16,200	29	50	21
Musical Activities	190,200	20,600	7	9	2
Auditorium Theatre	101,500	19,000	4	5	1
Intramural and recreational sports	321,300 ¹	17,300	13	19	6

Data are for 1978-79

¹ $BAU_{ik} = BAS_{ij}$ Users and non-users pay the same flat
fee, the "Registration fee".

¹ Includes income not drawn from registration fees.

MI

Recreational Sports

$E_i(1978-79) = \$2,000,000$

$CAS_{ij} = \$59$

reflect that some typically student type activities are internalized, and not really weighted against other activities. Only a part of the cultural programs going on at MA is supervised by the Student Affairs Office. Among those which are under student affairs responsibility, one can mention 30 to 40 scheduled annual performances (dance, music, theatre...), public lectures... It is estimated that one third of the audiences are students, another third staff and faculty, and the rest are off-campus people. Although there is no separate budget for these activities at MA, it is said that "almost no night of the year passes without lectures or concerts on campus."

At MA again, it is estimated that 75% of the undergraduates and 50% of the graduate students "participate in at least one sport", while, in 1973-74, 80% of the students were involved in intramural activities.

What we know in terms of costs (Table 7.) is only a partial view of the total amount of resources channelled into these activities, since many costs are hidden and since even human resources (faculty, staff and student's time) are only partially known. Because the population of users is big relative to the total population, non-users to users transfers are not as substantial as they are for more specific services at WI where all students pay a flat fee. In the case of recreational and cultural activities, the overall student population indeed constitutes a market in which demand for this type of services is both high and responsive to variations in prices.

x x
x

Whether student services are viewed as directly supporting academic achievements or as devices to enhance local communities, their performance is not easily assessable in terms of efficiency.

Only remote approximations of efficiency are possible and only "guesstimates" of costs are achievable; interpretations of both might be quite divergent. Finally, student burden figures are to be understood before the intervention of financial aid, which

limits their interest for immediate political action, since in many cases, there is no clue on how to adjust burdens and financial aid for each activity.

If food and housing activities are put aside, the cost (E) of total student services range from \$160 to \$380 per student each year. As far as transfer estimations are concerned, they obviously convey the qualifications applying to both costs and burdens.

Besides that, the substantial non-users/users transfers (in situations other than fee-for-basis) which have been evidenced for some activities should be seen in a global perspective. Since there are so many different types of services, the likelihood of any student to belong to a user group *vis à vis* some kind of activity is fairly high: in other words, at the global level, because of the diversity of the services, it is unlikely to find a pure non-user group subsidizing a whole range of activities for the large majority of users.

3. Actual and alternative patterns of change

Keeping in mind the normative characteristics of the 4 institutions reviewed, the above empirical foray has shed some light on the distribution of costs and benefits of student services. Indeed, these estimations, in addition to being partial, are static. What is needed now, is to assess what the future of student services is likely to be. A sound means to explore the future is to recall the past; this is why we first have to come back to the recent evolution of student services and to assess how the total amount of resources devoted to them have fared. For this purpose, information drawn from the 4 above case studies will be buttressed by data gathered at an aggregate level.

Three patterns of evolution are equally possible: one is the change in the total amount of services provided by institutions, another relates to changes within this global set of services: a third one lies in manipulating the sources of financing.

3.1. Adjusting student affairs budget

Data drawn from NCES surveys show that the relative share of resources allocated to student services have remained fairly stable during the last decade (NCES 1978). (6) Food and housing expenditures have shrunk somewhat, though, with noticeable variations depending on which type of institutions is considered: on the whole, private institutions spend more than public ones, non-doctorate granting 4-years institutions (whatever their affiliation) spend more than others, and 2-year private colleges rank first for the portion of their resources which is devoted to student services (Tables A.11 to A.14).

In the 1960-70 to 1975-76 period, the following rates of increase were observed :

enrollments	40%
total expenditures	85%
housing & food expenditures	54%.

These figures reflect the fact that auxiliary services are not keeping pace with instructional expenditures, but this statement must be mitigated by the fact that in the same period, the Higher Education Price Index (HEPI) increased by 40%. Auxiliary service expenditures have then increased in real terms.

In per student terms, the general trend is also steadiness (Table A.15).

The NASPA Surveys bring interesting material because they cover the most recent years, those which have witnessed the release of some of the pressure on demand for higher education. In 1978-79, as many as 73% of all institutions had a steady (or decreasing) student affairs budget as compared to the previous year (Table A.16). Middle size institutions (10,000 to 19,999 students) were better able to resist this evolution and the situation seemed in a better control in 1978-79 than in 1975-76.

This pattern, however, is not confirmed by the observation of expenditures in two of our case studies, namely the two western universities, WA and WI (Tables A.17 and A.18). While per student expenditures on student services were slightly decreasing in relative terms at WA which enrolls 12,000 students, they were maintained steady at WI which enrolls 28,000 students.

Keeping in mind problems of definition, it remains true that expenditures on student services at WA have been cut since the time student enrollments started to level off. From 1977 to 1978, operating budget expenditures increased by 12%, while student services increased only by 7.2%. From 1978 to 1979, respective figures were 9% and 8.5%. In real terms, it means, at the best, a steady-state situation. At WI, an overall program of budgetary reduction has been implemented for three years already, and student services resources are readjusted each year, so as to comply with 3% to 4% annual reduction objectives. Student services, however, have kept up with other services at WI.

On the whole, observations of the recent evolution both at a national level and in two particular universities tend to suggest that student services have been indeed affected by resource reallocations, but less and less so. Once some savings have been realized, once some marginal activities have been phased down, student services do not appear to be, as such, a non-disputable target for cutbacks.

3.2. Internal reallocations

Are some student services more vulnerable than others? NASPA surveys, which have a national coverage, report for more than 40 student service activities, whether their budget has been reduced, maintained or increased as compared to the previous year (see Table A.16).

Among activities which have suffered the most, the surveys identify:

-residential life, women's activities, foreign student services and human development.

Some student services though, have expanded over the period 1975-1979; this is especially the case with:

-placement counseling, career counseling, health services, housing services and handicapped student programs.

Besides the latter kind of service, then, these activities which have been boosted in spite of the general slowdown all have in common that they are clearly oriented toward productive and immediate concerns, and reflect difficulties in obtaining comparable services from the outside market. On the other hand, activities with a strong "human development" component appear to be more seriously exposed. Resource scarcity brings about a revelation of priorities.

Those indicated by the NASPA survey are quite consistent with student preferences as shown by WI surveys (Table A.10). The way this university reacts with regard both to scarcity and to students' choices is also consistent with these preferences: child care services, student activities and foreign student services have suffered slightly more severe cutbacks than the average of other student services in this institution. At WA, in 1975-76 the main concern was to cut the less "efficient" parts in each activity, rather than to eliminate or reduce any of them. Residential activities and special programs and events, though, have been allocated relatively smaller amounts in the years following 1975-76, which again confirms the kind of hierarchies which tend to be created when priorities must be revealed.

Although these priorities seem to follow some commonalities, student affairs personnel emphasize that decisions on which activities to maintain and which ones to crunch are very much

dependent on each particular set of problems and potentialities: without significant effects in some cases, a decrease in housing counseling might be harmful in other cases.

3.3. Shifting the financial burden

Besides simple resource cutbacks and apart from pure savings, another response to threats of activities reductions is either an increment of incomes or a transfer of costs to other agents (departments/units).

A whole range of piecemeal actions is available to achieve these objectives and indeed, the fact that they are widely used hamper the clear understanding of actual reductions of activities vs. simple transfers.

WA offers some examples of transferring student services expenditures away from its Operating Budget to either auxiliary (financially self-contained) enterprises or Restricted Budgets. Transfers to auxiliary enterprises generally mean that prices include a larger proportion (if not all) of the costs. This is probably the core of the issue, that is the willingness of students to pay a fee which better represents the cost of the services they have available (flat fee) or they consume (fee-for-service). Another possibility is to "voucher" a portion of the cost of some activities; WI uses this technique now for Health Insurance. At WI, if only permanent funds are considered, 68% of student service resources were derived from registration fees (F_1 = flat fee), for the fiscal year 1978-79, while 13% of these resources came from incomes. This situation shows the two main possible lines of action: either to pass the buck to other contributors or to emphasize the relationship between student contributions and student use of the services, that is to bring the cost closer to the value of each service. At WI, the services which are ranked by students as being the more eligible to a fee-for-service principle are, in order:

-child care (a relatively expensive activity used by a small minority and ranked as not very important),

- health services (a very costly activity, both heavily used and ranked important),
- recreation facilities (a less expensive activity, both intensively used and well ranked in order of importance).

Shifting the burden to the users is a solution more often suggested than pure elimination. Once again, it is a combination of all these forms of resistance to shrinking resources which is to be found.

But empirically, transfer of expenditures from current funds budgets to restricted funds is the most difficult to seize and short of doing so, we might tend to overestimate resource cutbacks when they take place.

CONCLUSION

Extrapolating a present which is not clearly perceived into a future, by definition uncertain, is indeed a challenge. Instead of trying to take it up, we will only give some concluding comments, distinguishing two levels: the possible future evolution and the possible means to control this evolution.

The only probable occurrence -actually, it is already a reality- is the depressive trend of both demographic (i.e. levelling off of enrollments) and economic factors (i.e. decrease of total resources available for higher education as a whole). Now the translation of this demographic and mechanistic prediction into more specific extrapolations by type of institutions is more of a problem. And predictions about the future of student services are very much dependent on how enrollments and resources will behave in different institutions, which makes the exercise a tough one. For some, reallocations are going to be undertaken, both among institutions and within them. How student services will be affected by these changes depends both on their perceived contribution to the output and on their contribution to the harsher competition that scarce resources enhance. If private institutions are more affected than public ones by competition, student services might be severely hit at the national level since at this level, they are relatively more favored in private schools than in public ones. But if student services are viewed and used as a means of diversifying the production and attracting more students, then one might expect quite a different picture. Apart from this type of control, recent evolution suggests that institutions which have implemented an important program of student services are unlikely to drop these activities, and will only get rid of the "fat", preserving the specificity and the attractiveness they have built with these services. As for other institutions where student services are not as thoroughly developed, the chances to phase them down are equally slim so far as a minimum

of these services is considered as socially desirable, and more and more so. This is subject, though, to the strength of an opposite trend, the "unbundling" one (Wang 1975): if instead of being an unique package of several functions put together into what is called a university, higher education tends to be broken down and replaced by specialized institutions (information processing/accreditation/research), then, student services can be expected to suffer much more. Leaning toward a voucher system would probably have, through different means, a similar outcome. Putting aside these two possibilities, we are inclined to think that student services as such are not likely to be the first target of resource cutbacks.

As the Proposition 13 aftermaths in California have shown in the case of community colleges, the capacity for adjustment of higher education institutions are stronger than what might be thought. Postponing new investments, delaying major repairs and eliminating academic programs which are not followed are other types of reactions available to institutions, and they concern substantial resources.

The very recent past is not easy to interpret, though, and whether or not student services have resisted the downward trends which affect higher education is still uncertain. The figures we have presented witness this uncertainty. Without providing any data, Dutton and Rickard (1980) assert that during the recent period of retrenchment in higher education, student services were the victims of budgetary reduction. It has also been noticed that during the Great Depression, student services were cut back, and even eliminated (Delworth & Hanson 1980). Similarities between now and then are few, however, and the situation of the 1930s can hardly be used to predict what is going to happen in the 1980s.

"The task of justifying the continued investment in higher education is formidable" wrote Balderston in prefacing his *Managing Today's University*. The task today, has changed to a justification for resisting a slowdown of this investment. Or, to put it more accurately, to justify a level of investment which fits social needs the best. Student services are among these activities which have to be clearly

analysed to make their contribution better understood. This is the only level at which the observer is entitled to talk about the preferable, all other aspects being dominated by value judgments.

We do not see student services as part of the "socially imposed costs" that M. Bowen (1978) meaningfully identifies, (7) and we would rather assume they are among the *socially desirable* costs. For such an assumption to be thoroughly investigated, some initiatives are necessary, and they would include:

- a better knowledge of the preference of students, a better understanding of their evaluation of the services.
- a better "transparence" between the costs and the price of the services available, so as to raise the individual understanding of the financial mechanisms on which the production and the distribution of services depend.
- a closer interconnection between the form and the amount of financial aid and the type and the price of student services so as to eliminate financial deterrents to access to the services.
- an investigation of the possibility to generate incomes from student service programs.
- a shift from the production perspective to a distribution view in dealing with the performances of these services.
- further research to decide whether student services help or impede a successful transition from school to work.

Being involved in a lot of issues which spill beyond the limits of the academic output, contributing to its broadening, student services exemplify the complexity of education firms; they also underscore the pitfalls which endanger attempts to single out statistically one set of activities (or inputs) in the educational process and to reduce their part in this process into terms of technological coefficients.

Although a somewhat auxiliary activity in the academic realm, student services are a sensitive witness to the various types of rationalities which converge into the educational process.

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APPENDIX I

Classification of Student Services by
The National Association of Student Personnel Administration (NASPA)

<i>Residential life</i>	Housekeeping* Food Services* Maintenance* Off-Campus Housing* Administration* Program and Activities*
<i>Administrative Activities</i>	Admissions Registration/Student Records Financial Aid Campus Security and Safety Student Discipline/Judicial Day/Child Care* Research/Grant Development
<i>Human Development</i>	Academic Counseling Placement/Career Counseling* Personal Counseling* Foreign Student Affairs* Minority Affairs* Women's Affairs* Health Services* Learning Skills Development Orientation
<i>Student Activities</i>	Fraternity/Sorority Affairs* Student Organizations* Student Government Religious Affairs Recreation (e.g. intramurals)* Student Union Operations/Management* Campus Programming

The items marked with * are included in the definition of student services used in this study.

Source : NASPA Field Report n°1 (Fall, 1976), Table 3.

Table A.1 : Enrollments in the 4 institutions

	WA	WI	MA ¹	MI
1970-71	12,429	28,524	7,386	34,018
1975-76	12,350	29,665	7,773	35,117
1977-78	12,359	27,661	7,609	33,946
1978-79	11,727	28,809	7,781	22,684

¹ Degree candidates only

Table A.2 : The ratio undergraduates/graduates

	WA	WI	MA	MI
1970-71	1.2	1.9	.4	3.1
1975-76	1.3	2.3	.4	2.8
1977-78	1.2	2.2	.5	2.9

Table A.3 : Admission/Application and Enrollments
(admission rates for Freshmen) (%)

	WA	WI	MA	MI
Admissions/Applic.				
1970-71	24	69	41	82
1977-78	30	81	39	74
Enrollments/Admiss.				
1970-71	62	87	42	66
1977-78	62	70	44	59

Table A.4 : Number of degrees awarded

		WA	WI	MA	MI
1970-71	BA/BS	1,504	5,693	488	4,951
	MA/MS	1,256	2,179	940	2,691
	Professional	623	362	895	194
	Ph.D	567	736	431	778
1977-78	BA/BS	1,662	5,033	457	5,567
	MA/MS	1,372	2,258	835	2,499
	Professional	618	108	1,072	294
	Ph.D.	468	719	364	590

Table A.5 : Minorities Enrollments

		WA		WI		MA		MI	
		Under.	Grad.	Under.	Grad.	Under.	Grad.	Under.	Grad.
Hispanic	1970-71	2.9	1.1	.4	.1	n.a.	n.a.	.5	.8
	1978-79	5.9	3.4	3.3	3.4	n.a.	n.a.	1.0	1.4
Black	1970-71	4.1	2.9	3.8	3.2	n.a.	n.a.	3.8	3.3
	1978-79	5.4	3.5	3.3	3.5	n.a.	n.a.	3.9	2.4

Table A.6 : % of students using University residences, houses, fraternities, sororities or otherwise University-related housing

WA	68
WI	29
MA	38
MI	38

Table A.7 : Total Number
of Faculty and Staff

WA	7,070
WI	13,000
MA	7,440
MI	11,000

Table A.8 : Total Current Funds Revenues
(1977-78)

Total (\$1,000)		By Student (\$)
WA	209,000	16,900
WI	262,285	9,480
MA	187,037	24,580
MI	274,775	8,090

Table A.9 : Origin of Funds (%)

	WA	WI	MA	MI
Tuition and fees	51.0	8.4	19.8	6.5
Government	23.5	74.1	34.4	49.9
Other	25.5	17.5	45.8	43.6

A.10 : Use and importance of student services at WI
(by rank)

	Rank by the highest Percentage of Students	Rank by the highest on mean importance
On Campus cultural events	1	10
Campus Lectures and Symposia	2	6
Recreational facilities on free play basis	3	7
Art Museum	4	20*
Medical care not requiring hospitalization	4	2
Listings of off-campus housing	6	7
Recreational facilities during evenings and week-ends	7	17
Assistance finding part-time, summer jobs	8	3
Job listings and informations on job market	9	1
Campus Emergency health care night, weekends	20*	5
Services for physically handicapped students	20*	7

Source : *Student Priorities among Students Services. W.I., 1977.*

* Refers to any rank after 17th.

Table A.11 : Percentage of Total Current Funds Expenditures allocated to Housing and Food (HF), Student Services (SS) and total, by control and level of institution, 1974-75 and 1976-77

	1974-75			1976-77		
	HF	SS	Total	HF	SS	Total
Public : Universities	6.1	2.7	8.8	6.1	2.9	9.0
Other 4-years	6.4	4.4	10.9	6.4	4.4	10.8
2-years	2.0	7.3	9.3	2.1	7.9	10.0
All	5.5	4.2	9.7	5.5	4.4	9.9
Private : University	5.3	2.4	7.6	5.1	2.4	7.5
Other 4-years	11.3	5.2	16.5	10.6	5.4	16.0
2-years	12.5	7.3	19.8	11.3	8.5	19.8
All	8.5	3.9	12.4	9.1	4.1	12.2
Total : University	5.8	2.6	8.4	5.8	2.7	8.5
Other 4-years	8.3	4.7	13.1	8.1	4.8	12.9
2-years	2.7	7.3	10.0	2.7	7.9	10.6
All	6.5	4.0	10.6	6.4	4.3	10.7

Source : Departement of Health, Education and Welfare. Financial Statistics of Institutions of Higher Education : Current Funds Revenues and Expenditures.

Table A.12 : Housing and Food (HF) expenditures, total expenditures (TE) :
proportion and annual increase, by control - 1969-70 to 1975-76

	1969-70	1970-71		1971-72		1972-73		1973-74		1974-75		1975-76		
	HF/TE	ΔTE	ΔHF	ΔTE	ΔHF	ΔTE	ΔHF	ΔTE	ΔHF	ΔTE	ΔHF	ΔTE	ΔHF	HF/TE
Public Control	6.6	13.2	10.2	9.9	5.7	10.5	1.6	12.0	8.4	15.6	14.9	11.3	11.5	5.5
Private Control	9.6	7.6	5.6	8.4	4.6	7.5	3.5	6.4	4.8	11.5	9.4	10.0	7.2	8.2
Total	7.7	11.1	8.1	9.4	5.2	9.4	2.4	9.9	6.6	14.2	12.7	10.9	9.9	6.4

Source : Departement of Health, Education and Welfare, Financial Statistics
of Institutions of Higher Education: Current Funds Revenues and Expenditures

Table A.13 : Housing and Food Expenditures (HF), Total Expenditures (TE) : 1972-73
to 1976-77, Increase (%) by Control and Level of Institution

		TE	HF
Public Control :	Universities	46.6	44.4
	Other 4-years	63.6	57.2
	2 years	71.1	68.8
	Total	57.1	51.5
Private Control :	Universities	40.1	40.0
	Other 4-years	46.7	32.6
	2 years	32.4	8.0
	Total	43.4	32.1
Total	: Total	52.3	43.4

Source : same as Table A.12.

Table A.14 : Percent Institutional
Budget allocated to
student affairs

	1976-77	1977-78	1978-79
	mean	mean	mean
All public	7.5	7.5	7.6
All private	8.2	7.2	7.5
All Universities	7.0	6.6	6.7
All 4-years	7.8	7.7	8.0
All 2-years	10.0	9.4	9.7
All institutions	7.8	7.5	7.7

Source : NASPA Budget Status Survey

Table A.15 : Per student expenditures for housing and food (HF) and student services (SS) by type of institution, 1972-73 to 1976-77 (\$)

	1972-73	1974-75	1976-77	
	HF per student	SS per student	HF per student	SS per student
Public	147	124	183	147
Universities	267	130	337	168
Private	394	205	481	244
Universities	366	187	476	223
Total Universities	204	141	248	167

Sources : From US Department of Health, Education and Welfare : Financial Statistics of Institutions of Higher Education, Digest of Educational Statistics 1975, and The Condition of Education.

Table A.16 : Students Affairs Budget changes
compared to previous year (%)

		All Institut.	Universit.	5000 to 9,999	10,000 to 19,000	20,000 and over
1975-76/1974-75	steady ¹	62	n.a.	70	55	
	increase ²	35	n.a.	30	44	
1977-78/1976-77	steady	68	68	73	67	72
	increase	32	32	27	33	28
1978-79/1977-78	steady	73	75	84	61	80
	increase	27	25	16	38	20

¹ include steady + decrease

² because of non-answers, totals might not be 100 %

Source : NASPA Surveys¹

Table A.17 : Per student expenditures on student services
(operating budget only) at WA, 1971-72 to 1978-79

	1971-72	1973-74	1978-79
(1) Student Services	350	420	620
(2) Instruction	2,540	3,080	4,820
(3) Total Operating Budget	5,040	6,090	10,120
(4) : (1)/(4) (percentage)	7.0	6.9	6.1

Source : WA, Operating Budget Guideline 1973-74 to 1978-79

Table A.18 : Per student expenditures on student services
(current funds expenditures only) at WI, 1973-74
to 1977-78

	1973-74	1977-78
(1) Student Services	330	510
(2) Instruction	2,240	3,210
(3) Total Current Fund Expenditures	6,370	9,480
(4) : (1)/(4) (percentage)	5.2	5.4

FOOTNOTES

1. Definition used by Higher Education General Information Survey of the U.S. Department of Health, Education and Welfare.
2. NASPA Field Report No. 1 (Fall, 1976), Table 3. (See Appendix I).
3. This university is one of the four institutions retained in a set of case studies, the description of which is given in II.1. The institution we refer to here will be identified later as WA.
4. Same institutions as the one mentioned in note 3.
5. Task Force on Student Services and Activities (WA, 1975).
6. NCES, *Projections of Education Statistics, 1968-87* (Washington D.C.: U.S. Government Printing Office, 1978) and NCES, *The Condition of Education: Statistical Report* (1978 Edition).
7. H. R. Bowen, *Socially Imposed Costs of Higher Education* (Chicago: University of Illinois, David H. Henry Lecture, 1978).